Appendix G. Letters to the Idaho, Montana, and Wyoming State Historic Preservation Offices for Concurrence of *No Adverse Effect* to Cultural Resources under Section 106 of the National Historic Preservation Act of 1966.

D18(YELL)

DEC 1 7 2004

Dr. Mark Baumler Montana State Historic Preservation Office P.O. Box 201202 Helena, Montana 59620-1202

Re: Request for Section 106 Determination of No Adverse Effect under the National Historic Preservation Act for the 2004 Update of the Yellowstone National Park 1992 Wildland Fire Management Plan

Dear Dr. Baumler:

In 1992, the National Park Service (NPS) completed a Wildland Fire Management Plan (FMP) for Yellowstone National Park. An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) (Attachment 1) were completed for the FMP for compliance under the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seg.).

Severe fires during the 1994 and 2000 fire seasons resulted in federal recommendations for improvements in firefighter safety, interagency coordination, and meeting resource management objectives. An update of the 1992 FMP (2004 Update) is now required by the Department of Interior for Yellowstone to manage wildland fire in accordance with the 2001 Federal Wildland Fire Management Policy and Program Review (U.S. Department of Agriculture/U.S. Department of Interior, 2001), the Wildland and Prescribed Fire Implementation Procedures Reference Guide (Implementation Guide, Zimmerman and Bunnell, 1998), NPS Director's Order #18: Wildland Fire Management (DO-18, Department of Interior, 2003) and the supporting Reference Manual #18 (RM-18, Department of Interior, 1999). The 2004 Update will replace the 1992 FMP by incorporating the following four components: (1) revised terminology and decision-making process; (2) redrawing of the management zones into Fire Management Units; (3) 1993 and 2001 Yellowstone Hazardous Fuel Reduction Program Policies; and (4) documentation of participation in the Rural Fire Assistance Program. Because the wildland fire management options and the preferred alternative in the EA have not changed since the 1992 FMP, Yellowstone anticipates the use of a categorical exclusion for NEPA compliance for the 2004 Update for the next ten to fifteen years of wildland fire management activities. We expect to have the 2004 Update finalized by the end of December 2004.

Subsequent to the 1992 FMP, there have been numerous increases in cultural resource inventories and assessments such as the number of park properties listed and determined eligible

in the National Register of Historic Places, archeological sites inventoried, Cultural Landscape Inventories, and identification of ethnographical resources. Attachment 2 contains an updated list of cultural resource inventories, listings in the National Register, and reports. Yellowstone has determined that the 2004 Update does not include any changes in wildland fire management that would result in adverse effects to cultural resources and the improvements in the planning process with cultural resource specialists are anticipated to result in increased protection of cultural resources. With this letter, Yellowstone requests a concurrence of no adverse effect to cultural resources under Section 106 of the National Historic Preservation Act of 1966 (NHPA) (16 U.S.C. 470 et seq.) based on the description of the 2004 Update, previous Section 106 compliance, effects, and mitigation measures discussed below.

Overview of changes from the 1992 FMP in the 2004 Update

The 1992 FMP integrated three wildland fire management strategies: suppression, prescribed natural fire, and management-ignited prescribed fire. The terminology for these strategies has been changed to *wildland fire suppression*, *wildland fire use* (WFU), and *prescribed fire* (PF). The 1992 FMP also delineated the park into three management zones: a suppression zone around developed areas, a 1.5-mile conditional zone along the boundary of the park, and a prescribed natural fire zone for the remainder of the park which included the majority of the park's backcountry areas. These three zones have been redrawn as seven Fire Management Units (FMUs) (Attachment 3) to facilitate interagency fire management planning and the new interagency Fire Program Analysis fire budget process scheduled for implementation in FY2007. Wildland fire suppression, WFU and PF can occur in any one of these FMUs as long as they are managed under the appropriate management response (AMR) to be selected after comprehensive consideration of the risk to firefighter and public safety, available funding, and resource values to be protected. The AMR is part of the development of the Wildland Fire Implementation Plan (WFIP). The operating procedures for the WFIP are detailed in the Implementation Guide and NPS RM-18.

The objective of wildland fire suppression is to suppress human-caused and unwanted wildland fires safely and efficiently while accomplishing protection goals, as described in RM-18, Chapter 9. Protection priorities are (1) human life and (2) property and cultural/natural resources. Prioritization of property and cultural/natural resources will be based on the relative values to be protected, commensurate with fire management costs. Once people have been committed to a suppression response, they become the highest value to be protected. All human-caused and unwanted wildland fires will be suppressed using Minimum Impact Suppression Tactics (MIST) guidelines developed by the National Wildfire Coordinating Group (Attachment 4). The MIST guidelines include techniques which effectively accomplish wildland fire management objectives with the least cultural and environmental impact, commensurate with public and firefighter safety.

Wildland fire use is the management of a naturally-ignited fire that meets pre-determined prescriptive criteria based on fuels parameters. The goal of the WFU program is to permit lightning-caused fires to burn within ecosystems and perpetuate natural processes where historic fire suppression has not significantly altered fuel loads and forest composition/structure. The

2004 Update enhances the use of wildland fire to achieve resource benefits in each of the FMUs while ensuring the protection of life, property, and valuable cultural and natural resources.

Previous Yellowstone policies for non-fire hazardous fuels treatment applications in the wildland-urban interface (WUI) of developed areas and for backcountry cabins will be incorporated in the 2004 Update. These policies are the 1993 Yellowstone National Park Hazard Fuel Plan and the 2001 Yellowstone National Park Structure Protection and Firefighter Safety Hazard Fuels Management Guidelines. The purpose of implementing wildland-urban interface fuels management at YNP is to protect human life and preserve developments, park infrastructure, and cultural resources of the park by thinning trees and understory vegetation.

Prescribed fire is a fire ignited by park managers to achieve fuel treatment and resource management goals as stated in the 2001 NPS Management Policies and Yellowstone's 1998 Resource Management Plan (RMP). Prescribed fire activities will include monitoring programs that record fire behavior, smoke behavior, fire decisions, and fire effects to provide information on whether specific objectives are met. Prescribed fire may be used in conjunction with mechanical hazardous fuels reduction to burn fuels that accumulate from these fuel reduction operations and for research purposes to meet stated park resource management goals.

Compliance with the National Historic Preservation Act of 1966

The SHPO reviewed the 1992 FMP for compliance with NHPA Section 106 and suggested that the park take a more proactive approach to protecting cultural resources from fire-related activities (see Attachment 1). Ethnographic resources and cultural landscapes were not identified in the 1992 FMP and EA.

Section 106 consultation with the SHPO was completed for mechanical hazardous fuels treatments at the Winter Creek backcountry cabins in 2003 and the West Entrance developed area in 2004. The park anticipates implementing hazardous fuels treatments at 8 additional developed areas and 26 backcountry cabins over the next 9 years. Attachment 5 lists these developed areas and backcountry cabins and their compliance status for Section 106 and NEPA for 2005-2013. Hazardous fuels treatments are proposed for the South Riverside and Daly Creek patrol cabins within the State of Montana. Both of these cabins have been determined eligible for listing in the National Register. The park will conduct Section 106 consultation prior to fuels treatments at these cabins.

Yellowstone consults on a semi-annual basis with 26 associated tribes, each having particular historical traditions associated with Yellowstone. The 26 associated tribes have previously been consulted for mechanical fuels treatments at the Lake Village, Northeast Entrance, and East Entrance WUI developed areas and for 29 backcountry cabins based on the 2002 *Wildland-Urban Interface Fuels Management Environmental Assessment* and for fuels treatments at West Entrance, Canyon Village, and South Entrance based on reports submitted in 2004.

All proposed prescribed fires in the future will adhere to requirements under RM-18, Chapter 11. Yellowstone will consult with SHPO for Section 106 compliance and with the associated tribes prior to implementation of any prescribed fire.

Potential Effects to Cultural Resources from the Wildland Fire Management Program

NPS Director's Order 28: *Cultural Resources Management*, NPS-28: *Cultural Resource Management Guideline*, NPS 2001 *Management Policies*, and Director's Order 28A: *Archeology* state the basic principles governing the management and protection of cultural resources in Yellowstone.

Potential adverse effects to cultural resources (including museum objects, archeological resources, historic structures, ethnographical resources, and cultural landscapes) include effects from suppression responses, wildland fires (both human-caused and wildland fire use), prescribed fire, and mechanical fuels reduction treatments.

Sites that provide evidence of Native American presence in Yellowstone include hearths, roasting pits, game drives, hunting blinds, base camps, chipping stations, rock shelters, wickiups, quarries, and tipi rings. Non-organic prehistoric resources are assumed to have survived previous wildland fires; therefore, adverse effects are unlikely. However, adverse impacts to these sites from suppression activities are possible. Effects from suppression methods include ground-disturbance from firefighter camps and associated human activity, application of retardants, use of wet-lines, and digging of handlines. Archeological sites, historic structures, ethnographical resources, and cultural landscapes that contain organic material such as wood (i.e., wickiups, fences, and signs) are more likely to be impacted from wildland fire and WFU fires and will need more active intervention for protection than non-organic sites.

The majority of the park's 5.3 million museum objects are housed in the recently constructed Yellowstone Heritage and Research Center located at the park's North Entrance in Gardiner, Montana. Protection of museum objects that are housed in park buildings from fire falls under the park's structural fire management program and not the wildland fire management program. Any museum objects not housed in facilities will be afforded the same level of protection as other cultural resource features under the wildland fire management program.

Mitigation

1. Planning During the Non-Fire Season

The fire season in Yellowstone is June 15 to September 30. Planning during the non-fire season to incorporate cultural resource survey and mapping information into the wildland fire management program will be incorporated as part of the 2004 Update. Not all of the known cultural resource site information has been mapped in the park's Geographic Information System (GIS) database and some of the existing GIS locations are inaccurate. Cultural resource specialists will coordinate with the Fire Management Officer (FMO) and other fire management staff as part of the Fire Strategy Working Group to identify sensitive cultural resources and potential areas that may contain sensitive cultural resources within each FMU as well as

appropriate mitigation measures for suppression responses, WFU, PF, and hazardous fuels reduction treatments. The Fire Strategy Working Group is comprised of specialists in fire management, resources, and planning, and meets periodically to discuss fire management implementation and compliance during the non-fire season as well as during the fire season. Pre-suppression planning that includes fire detection and implementation of appropriate suppression methods are key ingredients in long-term planning for protecting cultural resources from fire. Planning should include provisions for surveys and protection to precede fire line construction to avoid and/or minimize impacts to cultural resources. Planning during the non-fire season will also incorporate information annually from the preceding fire season to enable specialists to predict likely effects on cultural resources from the wildland fire management program.

Adverse effects to historic structures that are eligible for or listed in the National Register, as well as historic structures that have not been evaluated for the National Register, must be considered in the fire management planning process. Structures that have been determined ineligible for the National Register will not be considered as a resource value to be protected under the 2004 Update. As cultural resources are identified in the park, they will be evaluated for eligibility to the National Register. If they are determined to be eligible to the National Register, they will need to be protected as necessary during all types of management responses.

Yellowstone's RMP describes the park's primary cultural resource concerns, funding needs related to them, and associated management programs. The NPS is developing a *Resource Stewardship Plan* that will replace the 1998 RMP and will focus on development of desired future conditions (DFCs). These DFCs will be incorporated into the wildland fire management program and planning process as they are developed.

2. Pre-Attack Planning During the Fire Season

The pre-attack plan is part of the park's suppression program and is reviewed annually prior to the fire season and revised as necessary by the Fire Management Committee. Information sources for setting suppression priorities include sensitive cultural and natural resource areas and sites, wildland urban interface, timber type, vegetation maps, wildlife habitat, fuel maps, and smoke/air quality impact models. The FMO will coordinate with cultural resource specialists for criteria to include in the pre-attack plan. The Fire Management Committee will ensure that sensitive information on values and locations stated in the pre-attack plan are protected from inappropriate dissemination. The FMO will maintain the pre-attack plan.

The park's FMO will consult with the appropriate cultural resource specialist or designated cultural resource management representative during a suppression response or a WFU fire to determine whether any cultural resources are at risk, to determine any mitigation measures to implement, or whether the work needs to be halted until formal consultation with the appropriate SHPO and associated tribes has concluded. In areas where suppression efforts are to occur, archeological surveys will be conducted in cooperation with the park archeologist.

3. Minimum Impact Suppression Tactics During Suppression Responses

Yellowstone will adhere to the MIST guidelines to avoid or mitigate impacts to sensitive cultural resources. These include specific mitigation measures such as fireline construction and mop-up (including ground and aerial fuels); aviation management (including retardant, foam, and water bucket use); logistics, firefighter camp sites, staging areas, helispots, and personal conduct; and restoration and rehabilitation.

4. Education

Fire management staff, cultural resource specialists and resource advisors will educate fire crews on the appropriate method of protection of cultural resource sites and features during suppression, WFU, PF, and hazardous fuels reduction treatments. The methods chosen are dependent on fire behavior and the type of cultural resource to be protected. The type of methods available include digging of hand line to redirect the fire around or away from the feature or areas, the use of hoses to lay wet lines, sprinklers, and shelters.

5. Monitoring

Because monitoring of WFU fires may require on-the-ground holding actions, all ground-disturbing activities will adhere to the MIST guidelines. Monitoring of impacts to cultural resources during suppression responses will be conducted by fire management staff, cultural resource specialists, and resource advisors in the field. Assuming sufficient funding, cultural resource specialists will conduct post-WFU fire surveys following WFUs to determine fire effects on known cultural resources and to prepare appropriate documentation when necessary. The cultural resource specialist will consult with the SHPO if adverse effects occur or cultural resources are identified during the post-fire assessments.

Please sign and date the signature block below if you concur with our determination of no adverse effects to cultural resources from the 2004 Update. If you have any questions or request additional information, please contact Ann Johnson, Archeologist, at (307) 344-2155.

\in	cer	ρΙΝ	
Sin	CCI	СГУ	,

Suzanne Lewis Superintendent Yellowstone National Park

Montana State Historic Preservation Office	
Concur:SHPO Review NoDate:	-

Enclosures:

Attachment 1. Finding of No Significant Impact for the 1992 Wildland Fire Management Plan

Attachment 2. Cultural Resources Updated Information

Attachment 3. Figure of Fire Management Units

Attachment 4: Minimum Impact Suppression Tactics

Attachment 5: Proposed Hazardous Fuels Treatments in Developed Areas and

Backcountry Cabins and Compliance Status: 2005-2013

cc:

Jill Cowley, w/enc.

Adrienne Anderson, w/enc.

Scott Paulowski, w/enc.

Paul Sanders, w/enc.

Anne Vawser, w/enc.

Dennis Stanford, w/enc.

Terry Childs, w/enc.

National Trust for Historic Preservation, w/enc.

D18(YELL)

DEC 1 7 2004

Mr. Steve Guerber Idaho State Historical Society 1109 Main Street, Suite 250 Boise, Idaho 83702-5642

Re: Request for Section 106 Determination of No Adverse Effect under the National Historic

Management Plan

Dear Mr. Guerber:

In 1992, the National Park Service (NPS) completed a Wildland Fire Management Plan (FMP) for Yellowstone National Park. An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) (Attachment 1) were completed for the FMP for compliance under the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.).

in the National Register of Historic Places, archeological sites inventoried, Cultural Landscape Inventories, and identification of ethnographical resources. Attachment 2 contains an updated list of cultural resource inventories, listings in the National Register, and reports. Yellowstone has determined that the 2004 Update does not include any changes in wildland fire management that would result in adverse effects to cultural resources and the improvements in the planning process with cultural resource specialists are anticipated to result in increased protection of cultural resources. With this letter, Yellowstone requests a concurrence of no adverse effect to cultural resources under Section 106 of the National Historic Preservation Act of 1966 (NHPA) (16 U.S.C. 470 et seq.) based on the description of the 2004 Update, previous Section 106 compliance, effects, and mitigation measures discussed below.

Overview of changes from the 1992 FMP in the 2004 Update

The 1992 FMP integrated three wildland fire management strategies: suppression, prescribed natural fire, and management-ignited prescribed fire. The terminology for these strategies has been changed to *wildland fire suppression*, *wildland fire use* (WFU), and *prescribed fire* (PF). The 1992 FMP also delineated the park into three management zones: a suppression zone around developed areas, a 1.5-mile conditional zone along the boundary of the park, and a prescribed natural fire zone for the remainder of the park which included the majority of the park's backcountry areas. These three zones have been redrawn as seven Fire Management Units (FMUs) (Attachment 3) to facilitate interagency fire management planning and the new interagency Fire Program Analysis fire budget process scheduled for implementation in FY2007. Wildland fire suppression, WFU and PF can occur in any one of these FMUs as long as they are managed under the appropriate management response (AMR) to be selected after comprehensive consideration of the risk to firefighter and public safety, available funding, and resource values to be protected. The AMR is part of the development of the Wildland Fire Implementation Plan (WFIP). The operating procedures for the WFIP are detailed in the Implementation Guide and NPS RM-18.

The objective of wildland fire suppression is to suppress human-caused and unwanted wildland fires safely and efficiently while accomplishing protection goals, as described in RM-18, Chapter 9. Protection priorities are (1) human life and (2) property and cultural/natural resources. Prioritization of property and cultural/natural resources will be based on the relative values to be protected, commensurate with fire management costs. Once people have been committed to a suppression response, they become the highest value to be protected. All human-caused and unwanted wildland fires will be suppressed using Minimum Impact Suppression Tactics (MIST) guidelines developed by the National Wildfire Coordinating Group (Attachment 4). The MIST guidelines include those techniques which effectively accomplish wildland fire management objectives with the least cultural and environmental impact, commensurate with public and firefighter safety.

Wildland fire use is the management of a naturally-ignited fire that meets pre-determined prescriptive criteria based on fuels parameters. The goal of the WFU program is to permit lightning-caused fires to burn within ecosystems and perpetuate natural processes where historic fire suppression has not significantly altered fuel loads and forest composition/structure. The

2004 Update enhances the use of wildland fire to achieve resource benefits in each of the FMUs while ensuring the protection of life, property, and valuable cultural and natural resources. Previous Yellowstone policies for non-fire hazardous fuels treatment applications in the wildland-urban interface (WUI) of developed areas and for backcountry cabins will be incorporated in the 2004 Update. These policies are the 1993 Yellowstone National Park Hazard Fuel Plan and the 2001 Yellowstone National Park Structure Protection and Firefighter Safety Hazard Fuels Management Guidelines. The purpose of implementing wildland-urban interface fuels management at YNP is to protect human life and preserve developments, park infrastructure, and cultural resources of the park by thinning trees and understory vegetation.

Prescribed fire is a fire ignited by park managers to achieve fuel treatment and resource management goals as stated in the 2001 NPS Management Policies and Yellowstone's 1998 Resource Management Plan (RMP). Prescribed fire activities will include monitoring programs that record fire behavior, smoke behavior, fire decisions, and fire effects to provide information on whether specific objectives are met. Prescribed fire may be used in conjunction with mechanical hazardous fuels reduction to burn fuels that accumulate from these fuel reduction operations and for research purposes to meet stated park resource management goals.

Compliance with the National Historic Preservation Act of 1966

The Idaho State Historical Society reviewed the 1992 FMP and pointed out that fire would affect noncombustible materials at archeological sites. Ethnographic resources and cultural landscapes were not detailed in the 1992 FMP and EA.

Section 106 consultations with the Wyoming SHPO and Montana SHPO were completed for several mechanical hazardous fuels reduction projects in developed areas and backcountry cabins in 2003 and 2004. The park anticipates implementing hazardous fuels treatments at 8 additional developed areas and 26 backcountry cabins over the next 9 years. Attachment 5 lists these developed areas and backcountry cabins and their compliance status for Section 106 and NEPA for 2005-2013. A hazardous fuel reduction treatment is proposed for Buffalo Lake snowshoe cabin within the State of Idaho. The Buffalo Lake snowshoe cabin was listed in the Fort Yellowstone National Historic Landmark Nomination in 2003. The park will adhere to Section 106 requirements prior to implementation of hazardous fuels treatment at this cabin.

Yellowstone consults on a semi-annual basis with 26 associated tribes, each having particular historical traditions associated with Yellowstone. The 26 associated tribes have previously been consulted for mechanical fuels treatments at the Lake Village, Northeast Entrance, and East Entrance WUI developed areas and for 29 backcountry cabins based on the 2002 *Wildland-Urban Interface Fuels Management Environmental Assessment* and for fuels treatments at West Entrance, Canyon Village, and South Entrance based on reports submitted in 2004. Government-to-government consultation will be conducted prior to implementation of the proposed WUI hazardous fuel treatments in Attachment 5.

All proposed prescribed fires in the future will adhere to requirements under RM-18, Chapter 11. Yellowstone will consult with SHPO for Section 106 compliance and with the associated tribes prior to implementation of any prescribed fire.

Potential Effects to Cultural Resources from the Wildland Fire Management Program

NPS Director's Order 28: *Cultural Resources Management*, NPS-28: *Cultural Resource Management Guideline*, NPS 2001 *Management Policies*, and Director's Order 28A: *Archeology* state the basic principles governing the management and protection of cultural resources in Yellowstone.

Potential adverse effects to cultural resources (including museum objects, archeological resources, historic structures, ethnographical resources, and cultural landscapes) include effects from suppression responses, wildland fires (both human-caused and wildland fire use), prescribed fire, and mechanical fuels reduction treatments.

Sites that provide evidence of Native American presence in Yellowstone include hearths, roasting pits, game drives, hunting blinds, base camps, chipping stations, rock shelters, wickiups, quarries, and tipi rings. Non-organic prehistoric resources are assumed to have survived previous wildland fires; therefore, adverse effects are unlikely. However, adverse impacts to these sites from suppression activities are possible. Effects from suppression methods include ground-disturbance from firefight

Pre-suppression planning that includes fire detection and implementation of appropriate suppression methods are key ingredients in long-term planning for protecting cultural resources from fire. Planning should include provisions for surveys and protection to precede fire line construction to avoid and/or minimize impacts to cultural resources. Planning during the non-fire season will also incorporate information annually from the preceding fire season to enable specialists to predict likely effects on cultural resources from the wildland fire management program.

Adverse effects to historic structures that are eligible for or listed in the National Register, as well as historic structures that have not been evaluated for the National Register, must be considered in the fire management planning process. Structures that have been determined ineligible for the National Register will not be considered as a resource value to be protected under the 2004 Update. As cultural resources are identified in the park, they will be evaluated for eligibility to the National Register. If they are determined to be eligible to the National Register, they will need to be protected as necessary during all types of management responses.

Yellowstone's RMP describes the park's primary cultural resource concerns, funding needs related to them, and associated management programs. The NPS is developing a *Resource Stewardship Plan* that will replace the 1998 RMP and will focus on development of desired future conditions (DFCs). These DFCs will be incorporated into the wildland fire management program and planning process as they are developed.

2. Pre-Attack Planning During the Fire Season

The pre-attack plan is part of the park's suppression program and is reviewed annually prior to the fire season and revised as necessary by the Fire Management Committee. Information sources for setting suppression priorities include sensitive cultural and natural resource areas and sites, wildland urban interface, timber type, vegetation maps, wildlife habitat, fuel maps, and smoke/air quality impact models. The FMO will coordinate with cultural resource specialists for criteria to include in the pre-attack plan. The Fire Management Committee will ensure that sensitive information on values and locations stated in the pre-attack plan are protected from inappropriate dissemination. The FMO will maintain the pre-attack plan.

The park's FMO will consult with the appropriate cultural resource specialist or designated cultural resource management representative during a suppression response or a WFU fire to determine whether any cultural resources are at risk, to determine any mitigation measures to implement, or whether the work needs to be halted until formal consultation with the appropriate SHPO and associated tribes has concluded. In areas where suppression efforts are to occur, archeological surveys will be conducted in cooperation with the park archeologist.

3. Minimum Impact Suppression Tactics During Suppression Responses

Yellowstone will adhere to the MIST guidelines to avoid or mitigate impacts to sensitive cultural resources. These include specific mitigation measures such as fireline construction and mop-up (including ground and aerial fuels); aviation management (including retardant, foam, and water

bucket use); logistics, firefighter camp sites, staging areas, helispots, and personal conduct; and restoration and rehabilitation.

4. Education

Fire management staff, cultural resource specialists and resource advisors will educate fire crews on the appropriate method of protection of cultural resource sites and features during suppression, WFU, PF, and hazardous fuels reduction treatments. The methods chosen are dependent on fire behavior and the type of cultural resource to be protected. The type of methods available include digging of hand line to redirect the fire around or away from the feature or areas, the use of hoses to lay wet lines, sprinklers, and shelters.

5. Monitoring

Because monitoring of WFU fires may require on-the-ground holding actions, all ground-disturbing activities will adhere to the MIST guidelines. Monitoring of impacts to cultural resources during suppression responses will be conducted by fire management staff, cultural resource specialists, and resource advisors in the field. Assuming sufficient funding, cultural resource specialists will conduct post-WFU fire surveys following WFUs to determine fire effects on known cultural resources and to prepare appropriate documentation when necessary. The cultural resource specialist will consult with the SHPO if adverse effects occur or cultural resources are identified during the post-fire assessments.

Please sign and date the signature block below if you concur with our determination of no adverse effects to cultural resources from the 2004 Update. If you have any questions or request additional information, please contact Ann Johnson, Archeologist, at (307) 344-2155.

Sincerely,

Suzanne Lewis Superintendent

Idaho State Historical Society	
Concur:SHPO Review NoDate:	-

Enclosures:

Attachment 1. Finding of No Significant Impact for the 1992 Wildland Fire Management Plan

Attachment 2. Cultural Resources Updated Information

Attachment 3. Figure of Fire Management Units

Attachment 4: Minimum Impact Suppression Tactics

Attachment 5: Proposed Hazardous Fuels Treatments in WUI Developed Areas and

Backcountry Cabins and Compliance Status: 2005-2013

cc:

Jill Cowley, w/enc.

Adrienne Anderson, w/enc.

Scott Paulowski, w/enc.

Paul Sanders, w/enc.

Anne Vawser, w/enc.

Dennis Stanford, w/enc.

Terry Childs, w/enc.

National Trust for Historic Preservation, w/enc.

D18(YELL)
DEC 1 7 2006

Ms. Claudia Nissley
Wyoming State Historic Preservation Office
Barrett Building, 3rd Floor
2301 Central Avenue
Cheyenne, Wyoming 82002

Re: Request for Section 106 Determination of No Adverse Effect under the National Historic Preservation Act for the 2004 Update of the Yellowstone National Park 1992 Wildland Fire Management Plan

Dear Ms. Nissley:

In 1992, the National Park Service (NPS) completed a Wildland Fire Management Plan (FMP) for Yellowstone National Park. An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) (Attachment 1) were completed for the FMP for compliance under the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 et seq.).

Severe fires during the 1994 and 2000 fire seasons resulted in federal recommendations for improvements in firefighter safety, interagency coordination, and meeting resource management objectives. An update of the 1992 FMP (2004 Update) is now required by the Department of Interior for Yellowstone to manage wildland fire in accordance with the 2001 Federal Wildland Fire Management Policy and Program Review (U.S. Department of Agriculture/U.S. Department of Interior, 2001), the Wildland and Prescribed Fire Implementation Procedures Reference Guide (Implementation Guide, Zimmerman and Bunnell, 1998), NPS Director's Order #18: Wildland Fire Management (DO-18, Department of Interior, 2003) and the supporting Reference Manual #18 (RM-18, Department of Interior, 1999). The 2004 Update will replace the 1992 FMP by incorporating the following four components: (1) revised terminology and decision-making process; (2) redrawing of the management zones into Fire Management Units; (3) 1993 and 2001 Yellowstone Hazardous Fuel Reduction Program Policies; and (4) documentation of participation in the Rural Fire Assistance Program. Because the wildland fire management options and the preferred alternative in the EA have not changed since the 1992 FMP, Yellowstone anticipates the use of a categorical exclusion for NEPA compliance for the 2004 Update for the next ten to fifteen years of wildland fire management activities. We expect to have the 2004 Update finalized by the end of December 2004.

Subsequent to the 1992 FMP, there have been numerous increases in cultural resource inventories and assessments such as the number of park properties listed and determined eligible in the National Register of Historic Places, archeological sites inventoried, Cultural Landscape Inventories, and identification of ethnographical resources. Attachment 2 contains an updated list of cultural resource inventories, listings in the National Register, and reports. Yellowstone has determined that the 2004 Update does not include any changes in wildland fire management that would result in adverse effects to cultural resources and the improvements in the planning process with cultural resource specialists are anticipated to result in increased protection of cultural resources. With this letter, Yellowstone requests a concurrence of no adverse effect to cultural resources under Section 106 of the National Historic Preservation Act of 1966 (NHPA) (16 U.S.C. 470 et seq.) based on the description of the 2004 Update, previous Section 106 compliance, effects, and mitigation measures discussed below.

Overview of changes from the 1992 FMP in the 2004 Update

The 1992 FMP integrated three wildland fire management strategies: suppression, prescribed natural fire, and management-ignited prescribed fire. The terminology for these strategies has been changed to *wildland fire suppression*, *wildland fire use* (WFU), and *prescribed fire* (PF). The 1992 FMP also delineated the park into three management zones: a suppression zone around developed areas, a 1.5-mile conditional zone along the boundary of the park, and a prescribed natural fire zone for the remainder of the park which included the majority of the park's backcountry areas. These three zones have been redrawn as seven Fire Management Units (FMUs) (Attachment 3) to facilitate interagency fire management planning and the new interagency Fire Program Analysis fire budget process scheduled for implementation in FY2007. Wildland fire suppression, WFU and PF can occur in any one of these FMUs as long as they are managed under the appropriate management response (AMR) to be selected after comprehensive consideration of the risk to firefighter and public safety, available funding, and resource values to be protected. The AMR is part of the development of a Wildland Fire Implementation Plan.

The objective of wildland fire suppression is to suppress human-caused and unwanted wildland fires safely and efficiently while accomplishing protection goals, as described in RM-18, Chapter 9. Protection priorities are (1) human life and (2) property and cultural/natural resources. Prioritization of property and cultural/natural resources will be based on the relative values to be protected, commensurate with fire management costs. Once people have been committed to a suppression response, they become the highest value to be protected. All human-caused and unwanted wildland fires will be suppressed using Minimum Impact Suppression Tactics (MIST) guidelines developed by the National Wildfire Coordinating Group (Attachment 4). The MIST guidelines include techniques which accomplish wildland fire management objectives with the least cultural and environmental impact, commensurate with public and firefighter safety.

Wildland fire use is the management of a naturally-ignited fire that meets pre-determined prescriptive criteria based on fuels parameters. The goal of the WFU program is to permit lightning-caused fires to burn within ecosystems and perpetuate natural processes where historic fire suppression has not significantly altered fuel loads and forest composition/structure. The 2004 Update enhances the use of wildland fire to achieve resource benefits in each of the FMUs while ensuring the protection of life, property, and valuable cultural and natural resources.

Previous Yellowstone policies for non-fire hazardous fuels treatment applications in the wildland-urban interface (WUI) of developed areas and for backcountry cabins will be incorporated in the 2004 Update. These policies are the 1993 Yellowstone National Park Hazard Fuel Plan and the 2001 Yellowstone National Park Structure Protection and Firefighter Safety Hazard Fuels Management Guidelines. The purpose of implementing wildland-urban interface fuels management at YNP is to protect human life and preserve developments, park infrastructure, and cultural resources of the park by thinning trees and understory vegetation.

Prescribed fire is a fire ignited by park managers to achieve fuel treatment and resource management goals as stated in the 2001 NPS Management Policies and Yellowstone's 1998 Resource Management Plan (RMP). Prescribed fire activities will include monitoring programs that record fire behavior, smoke behavior, fire decisions, and fire effects to provide information on whether specific objectives are met. Prescribed fire may be used in conjunction with mechanical hazardous fuels reduction to burn fuels that accumulate from these fuel reduction operations and for research purposes to meet stated park resource management goals.

Compliance with the National Historic Preservation Act of 1966

The SHPO reviewed the 1992 FMP for compliance with NHPA Section 106 and concurred with the stated fire management goals in the plan for the protection of museum collections and historic and prehistoric cultural resources (see Attachment 1). In addition, the SHPO recommended provisions for inventorying cultural resources subsequent to fire activities where substantial ground cover was removed, protecting additional cultural resources discovered that could be affected from the fire management program, and notifying the SHPO when appropriate. Ethnographic resources and cultural landscapes were not identified in the 1992 FMP and EA.

Section 106 consultation with the SHPO was completed for mechanical hazardous fuels treatments at the Fox Creek and Harebell backcountry cabins in 2003 and within the Canyon Village and South Entrance WUI developed areas in 2004. The park anticipates implementing hazardous fuels treatments at 8 additional developed areas and 26 backcountry cabins over the next 9 years. Attachment 5 lists these developed areas and backcountry cabins and their compliance status for Section 106 and NEPA for 2005-2013. The park will complete Section 106 consultation requirements for treatment sites that have structures listed in the National Register or are determined eligible for listing in the National Register.

Yellowstone consults on a semi-annual basis with 26 associated tribes, each having particular historical traditions associated with Yellowstone. The 26 associated tribes have previously been consulted for mechanical hazardous fuels treatments at the Lake Village, Northeast Entrance, and East Entrance WUI developed areas and for 29 backcountry cabins based on the 2002 *Wildland-Urban Interface Fuels Management Environmental Assessment* and for fuels treatments at West Entrance, Canyon Village, and South Entrance based on reports submitted in 2004. Government-to-government consultation will be conducted prior to implementation of the proposed WUI hazardous fuel treatments in Attachment 5.

All proposed prescribed fires in the future will adhere to requirements under RM-18, Chapter 11. Yellowstone will consult with SHPO for Section 106 compliance and with the associated tribes prior to implementation of any prescribed fire.

Potential Effects to Cultural Resources from the Wildland Fire Management Program

NPS Director's Order 28: *Cultural Resources Management*, NPS-28: *Cultural Resource Management Guideline*, NPS 2001 *Management Policies*, and Director's Order 28A: *Archeology* state the basic principles governing the management and protection of cultural resources in Yellowstone.

Potential adverse effects to cultural resources (including museum objects, archeological resources, historic structures, ethnographical resources, and cultural landscapes) include effects from suppression responses, wildland fires (both human-caused and wildland fire use), prescribed fire, and mechanical fuels reduction treatments.

Sites that provide evidence of Native American presence in Yellowstone include hearths, roasting pits, game drives, hunting blinds, base camps, chipping stations, rock shelters, wickiups, quarries, and tipi rings. Non-organic prehistoric resources are assumed to have survived previous wildland fires; therefore, adverse effects are unlikely. However, adverse impacts to these sites from suppression activities are possible. Effects from suppression methods include ground-disturbance from firefighter camps and associated human activity, application of retardants, use of wet-lines, and digging of handlines. Archeological sites, historic structures, ethnographical resources, and cultural landscapes that contain organic material such as wood (i.e., wickiups, fences, and signs) are more likely to be impacted from wildland fire and WFU fires and will need more active intervention for protection than non-organic sites.

The majority of the park's 4.9 million museum objects are housed in the recently constructed Yellowstone Heritage and Research Center located at the park's North Entrance in Gardiner, Montana. Protection of museum objects that are housed in park buildings from fire falls under the park's structural fire management program and not the wildland fire management program. Any museum objects not housed in facilities will be afforded the same level of protection as other cultural resource features under the wildland fire management program.

Mitigation

1. Planning During the Non-Fire Season

The fire season in Yellowstone is June 15 to September 30. Planning during the non-fire season to incorporate cultural resource survey and mapping information into the wildland fire management program will be incorporated as part of the 2004 Update. Not all of the known cultural resource site information has been mapped in the park's Geographic Information System (GIS) database and some of the existing GIS locations are inaccurate. Cultural resource specialists will coordinate with the Fire Management Officer (FMO) and other fire management staff as part of the Fire Strategy Working Group to identify sensitive cultural resources and potential areas that may contain sensitive cultural resources within each FMU as well as

appropriate mitigation measures for suppression responses, WFU, PF, and hazardous fuels reduction treatments. The Fire Strategy Working Group is comprised of specialists in fire management, resources, and planning, and meets periodically to discuss fire management implementation and compliance during the non-fire season as well as during the fire season. Pre-suppression planning that includes fire detection and implementation of appropriate suppression methods are key ingredients in long-term planning for protecting cultural resources from fire. Planning should include provisions for surveys and protection to precede fire line construction to avoid and/or minimize impacts to cultural resources. Planning during the non-fire season will also incorporate information annually from the preceding fire season to enable specialists to predict likely effects on cultural resources from the wildland fire management program.

Adverse effects to historic structures that are eligible for or listed in the National Register, as well as historic structures that have not been evaluated for the National Register, must be considered in the fire management planning process. Structures that have been determined ineligible for the National Register will not be considered as a resource value to be protected under the 2004 Update. As cultural resources are identified in the park, they will be evaluated for eligibility to the National Register. If they are determined to be eligible to the National Register, they will need to be protected as necessary during all types of management responses.

Yellowstone's RMP describes the park's primary cultural resource concerns, funding needs related to them, and associated management programs. The NPS is developing a *Resource Stewardship Plan* that will replace the 1998 RMP and will focus on development of desired future conditions (DFCs). These DFCs will be incorporated into the wildland fire management program and planning process as they are developed.

2. Pre-Attack Planning During the Fire Season

The pre-attack plan is part of the park's suppression program and is reviewed annually prior to the fire season and revised as necessary by the Fire Management Committee. Information sources for setting suppression priorities include sensitive cultural and natural resource areas and sites, wildland urban interface, timber type, vegetation maps, wildlife habitat, fuel maps, and smoke/air quality impact models. The FMO will coordinate with cultural resource specialists for criteria to include in the pre-attack plan. The Fire Management Committee will ensure that sensitive information on values and locations stated in the pre-attack plan are protected from inappropriate dissemination. The FMO will maintain the pre-attack plan.

The park's FMO will consult with the appropriate cultural resource specialist or designated cultural resource management representative during a suppression response or a WFU fire to determine whether any cultural resources are at risk, to determine any mitigation measures to implement, or whether the work needs to be halted until formal consultation with the appropriate SHPO and associated tribes has concluded. In areas where suppression efforts are to occur, archeological surveys will be conducted in cooperation with the park archeologist.

3. Minimum Impact Suppression Tactics During Suppression Responses

Yellowstone will adhere to the MIST guidelines to avoid or mitigate impacts to sensitive cultural resources. These include specific mitigation measures such as fireline construction and mop-up (including ground and aerial fuels); aviation management (including retardant, foam, and water bucket use); logistics, firefighter camp sites, staging areas, helispots, and personal conduct; and restoration and rehabilitation.

4. Education

Fire management staff, cultural resource specialists and resource advisors will educate fire crews on the appropriate method of protection of cultural resource sites and features during suppression, WFU, PF, and hazardous fuels reduction treatments. The methods chosen are dependent on fire behavior and the type of cultural resource to be protected. The type of methods available include digging of hand line to redirect the fire around or away from the feature or areas, the use of hoses to lay wet lines, sprinklers, and shelters.

5. Monitoring

Because monitoring of WFU fires may require on-the-ground holding actions, all ground-disturbing activities will adhere to the MIST guidelines. Monitoring of impacts to cultural resources during suppression responses will be conducted by fire management staff, cultural resource specialists, and resource advisors in the field. Assuming sufficient funding, cultural resource specialists will conduct post-WFU fire surveys following WFUs to determine fire effects on known cultural resources and to prepare appropriate documentation when necessary. The cultural resource specialist will consult with the SHPO if adverse effects occur or cultural resources are identified during the post-fire assessments.

Please sign and date the signature block below if you concur with our determination of no adverse effects to cultural resources from the 2004 Update. If you have any questions or request additional information, please contact Ann Johnson, Archeologist, at (307) 344-2155.

Sincerel	ly,
----------	-----

Suzanne Lewis Superintendent

Wyoming State Historic P	reservation Office	
Concur:SHPO Review No Date:		

Enclosures:

Attachment 1. Finding of No Significant Impact for the 1992 Wildland Fire Management Plan

Attachment 2. Cultural Resources Updated Information

Attachment 3. Figure of Fire Management Units

Attachment 4: Minimum Impact Suppression Tactics

Attachment 5: Proposed Hazardous Fuels Treatments in WUI DevelolWUIch WUanddn

Backarover Styt Gest 2000 U 20 d 3 Go 7

FINDING OF NO SIGNIFICANT IMPACT

ENVIRONMENTAL ASSESSMENT WILDLAND FIRE MANAGEMENT PLAN

YELLOWSTONE NATIONAL PARK IDAHO/MONTANA/WYOMING

Yellowstone National Park prepared the Environmental Assessment (EA) of the revised Wildland Fire Management Plan using the findings of the Fire Management Policy Review Team, appointed by the Secretaries of Agriculture and Interior, and the results of scientific research.

The preferred alternative (Proposal) will manage wildland fires using the full range of fire management techniques. Naturally-ignited fires would be allowed to burn in certain areas of the park under specific conditions. Management-ignited prescribed fires would be initiated by National Park Service personnel to accomplish a variety of objectives including hazard fuel reduction and the reintroduction of fire to those areas of the park where suppression has altered the natural fire regime. Fires that will be suppressed include all human-caused fires; all fires which pose a threat to human life, developments, or cultural resources; any natural ignition which does not meet prescription parameters at the time that it is discovered; and any natural or management-ignited prescribed fires which exceed prescription parameters while burning. Suppression will be accomplished using confine, contain, or control strategies.

On July 12, 1991, the park released the draft Wildland Fire Management Plan and Environmental Assessment for public review. A mailing was conducted to all interested parties, and a press release was issued to media-related contacts. On July 17, 1991, 140,000 "Report and Comment Forms" on Yellowstone National Park's Wildland Fire Management Plan were distributed through nine regional newspapers and the park's five Visitor Centers. The report and comment forms were also distributed directly in the communities of Cooke City, Big Sky, and Gardiner, Montana. The formal public comment period for the Environmental Assessment closed on August 30, 1991. By September 11, 1991, 349 written comments were received.

Of the 349 responses, approximately 41 percent were supportive of the park's preferred alternative (Proposal), approximately 10 percent favored full suppression of all fire occurring in Yellowstone National Park (Alternative A), 1 percent preferred the use of Management-Ignited Prescribed Fire Only (Alternative B), approximately 14 percent favored allowing natural processes to work to the greatest extent possible, with the provision that priority be given to the protection of people and property (Alternative C), and 34 percent did not express support for a particular alternative or presented other alternatives.

A majority of the respondents listed concerns that were not directly related to fire management. They included: the 1988 fires; protection of natural resources; management policy (harvesting of timber and reforestation); protection of human life, developments, and

cultural resources; economic and political influences on the park's fire management; research; interagency cooperation; fire prevention and public information programs; and funding for the proposed Wildland Fire Management Plan.

The U.S. Fish and Wildlife Service reviewed the Environmental Assessment for compliance with Section 7 of the Endangered Species Act (ESA) and determined that the overall effects would be beneficial to listed species. They requested that each prescribed burn be reviewed for ESA compliance. This will be handled through the Park Compliance Program for each action.

The Wyoming, Montana, and Idaho state historic preservation offices reviewed the plan for compliance with Section 106 of the National Historic Preservation Act. Idaho State Historical Society pointed out that fire would affect noncombustible materials found at archaeological sites. Montana's State Historic Preservation Office, Montana Historical Society suggested that we take a more proactive approach to protecting cultural resources from fire-related activities. Wyoming's Department of Commerce, Division of Parks & Cultural Resources, State Historic Preservation Office concurred with the fire management goals for the protection of historic and prehistoric cultural resources. They recommended that the plan include provisions for cultural resource inventories subsequent to fire activities where substantial ground cover was removed. If, during the implementation of this program, cultural resources are discovered or may possibly be affected, the resources will be protected, and the appropriate state historic preservation office will be notified.

The proposal does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The proposal will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor and temporary in effect. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local law. Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:

Superintendent, Yellowstone National Park

3/16/92 Date 3/2/92

Approved:

Minkel DSunda
Regional Director, Rocky Mountain Region

Attachment 2. Cultural Resources Updated Information

Museum Collections

Yellowstone's museum collections include archival and library collections of 3,000 linear feet of documents, 20,000 bound publications, 150 linear feet of vertical files, and approximately 2,000 manuscripts. The archival materials comprise the National Park Service's only National Archives and Records Administration satellite repository (Record Group 79), and the library materials are part of the Yellowstone Research Library. Items are accessioned and stored according to the museum standards outlined in the NPS Museum Handbook series.

The museum collection also contains cultural artifacts, natural science specimens, and the park's historic photograph archive. Among these collections are works of art, archeological artifacts and specimens (109,000 items); historic objects (approximately 55,000 items total); ethnographic artifacts (approximately 255 items); geological and paleontological collections, (more than 22,000 specimens total); biological specimens and a herbarium (totaling nearly 24,000 specimens); rare archival materials (over 4,832,000 items), and thousands of natural science collections stored in other repositories.

The majority of the park's 5.3 million museum objects are housed in the recently constructed Yellowstone Heritage and Research Center located at the park's North Entrance in Gardiner, Montana. This 33,000-square foot building meets the standards of American Association of Museums. Additional museum objects are displayed permanently in other locations in developed areas of the park such as visitor centers.

Archeological Assessments

For at least 11,000 years, Native Americans occupied the Greater Yellowstone Area. Currently archeological evidence indicates that the majority or all of the use of the park occurred during non-winter months, and was less during the recent Little Ice Age (A.D. 1400-1860) than in the previous millennia. The Crow, Shoshone, Bannock, Nez Perce, Blackfeet, and Gros Ventres were the primary historic tribes to have visited the park. Very little of the park's prehistoric archeological resources can be ethnically identified. The Sheepeaters are a group of Shoshone that are said to have occupied portions of Yellowstone during the first half of the nineteenth century but methods of identifying their sites from those of other tribes are not known.

More than 1,252 prehistoric and historic sites have been documented in Yellowstone. Included within the historic archeological sites are those of Euro-American origin such as solider stations, hotels, and can dumps. Approximately one-third of the archeological sites have been evaluated for eligibility to the National Register of Historic Places. Obsidian Cliff, a prehistoric obsidian quarry, has been named a National Historic Landmark. Approximately 100 sites are added each year to the NPS Archeological Sites Management Information System database, and Determinations of Eligibility are completed when needed or when time permits. Less than two percent of Yellowstone's 2.2 million acres have been intensively inventoried for archeological resources.

Historic Resources Studies

- Culpin, Mary Shivers. 1994. *The History of the Construction of the Road System in Yellowstone National Park, 1872-1966.* RMR No. 5, National Park Service, Denver, Colorado.
- Culpin, Mary Shivers. 2003. For the Benefit and Enjoyment of the People: A History of the Concession Development in Yellowstone National Park, 1872-1966. National Park Service, Yellowstone Center for Resources, Yellowstone National Park, Wyoming. YCR-CR-2003-01.
- Rydell, Kiki. In prep. *A History of Administrative Development in Yellowstone National Park,* 1872-1965. (Based on primary research by M.S. Culpin c.a. 1997, available on file at YCR). National Park Service, Yellowstone Center for Resources, Yellowstone National Park, Wyoming.

Historic Structures Reports

- Fort Yellowstone (1972)
- Old Faithful Inn, HS-2305 (*James McDonald Architects; HRA consultants, 1994*, updated by J. McDonald and A&E Architects for Old House restoration 2002)
- Roosevelt Lodge, HS-6130 (James McDonald Architects; HRA consultants, 1994)
- Mammoth Hot Springs Hotel, HS-2025 (*James McDonald Architects; HRA consultants*, 1995)—includes Dining Hall (HS-2026); Recreation Hall (HS-2027); and cabins type A (duplex w/o bath, HS-6314-6323 and HS-9999); type B (duplex w/bath, HS-2071, 2075, 2077-2079, 6301-6313 and HS-9997-9998); type C (single w/o bath, HS-6346-6365 and HS-7603); type D (single w/bath, HS-2095, HS-6325-6345 and HS-7604); type E (duplex w/shared bath, HS-2072, 2076, 2080-2084, and HS-9995-9996); and type F (single w/bath and dressing room, HS-2085-2094, HS-2096-2098).
- Old Faithful Lodge, HS-2337 (*James McDonald Architects; HRA consultants, 1995*) includes Single Guest Cabins 114, 141, 144, 226/227, 232, 233; Duplex Cabins 108/109, 131/132-139/140, 142/143, 145/146-155/156, 161/162-183/184, 200/201-224/225; quadruplex cabins 100/103, 110/113. 115/118-127/130, 157-160, E401-428; cabins 230/231, 236-239, 240, and 241-246; Columbine Dormitory (HS-2343), "Love Nest," and cabins north of it; Boiler House (HS-2339); Linen Building/Room (HS-2338); and several restroom and storage buildings. LCS records are unclear and need updating for this entire area.
- Fort Yellowstone Powerhouse, HS-0056 (James McDonald Architects and Historical Research Associates, Inc., 1996)
- Lake Lodge, HS-4050 (*James McDonald Architects; HRA consultants, 1997*) –includes Powerhouse/Boiler House (HS-4051); Guest Cabins A17-20 (HS-7049), A21-24 (HS-7048), A25-30 (HS-7057), A31-34 (modern), B1-4 (modern), B5-10 (HS-7053), B11-16 (HS-7054), B17-22 (HS-7055), C1-4 (HS-7046), C5-6 (HS-7039), C7-10 (HS-7047), C11-12 (HS-7038), C13-16 (HS-7045), D1-4 (HS-7050), D5-10 (HS-7056), D11-16 (HS-7053), D17-20 (HS-7043), E1-4 (HS-7044), E5-10 (HS-7040), E11-12 (modern), E13-14 (HS-7041), E15-18 (HS-7042); Laundry Building/Employee Pub (HS-4053); Linen Building (HS-4052); Mallard Dormitory (modern); Storage Building (HS-4059); Seagull/Boy's Dormitory (HS-7006); Personnel Building/Shed (HS-7005); Cabin 0 (#7024—ineligible); Cabin 00 (HS-7021); Cabin 000 (HS-7023); Employee Cabin 1 (modern or ineligible); Employee Cabin 2 or 6

- (HS-7596, formerly noted as HS-7597); Employee Cabin 3 (HS-7580); Employee Cabin 4 or 5 (#7022—ineligible); and two non-historic storage cabins
- Lower (HS-2302) and Upper (HS-2327) Service Stations at Old Faithful (*James McDonald Architects and Historical Research Associates, Inc., 1998*).
- Park Administration Building, HS-36 (A&E Architects, 2003).

List of Classified Structures

Yellowstone has 1,030 historic structures entered on the List of Classified Structures (LCS) as of September 30, 2004. Of these structures, 375 are listed in the National Register of Historic Places and 351 have been determined eligible for listing. The remaining 304 structures and buildings still need to be evaluated for eligibility to the National Register. National Historic Landmarks include the Fort Yellowstone National Historic Landmark District which has forty seven buildings, structures and historic landscape features, and five individual NHL structures, including the Northeast Entrance Station, the Norris, Madison and Fishing Bridge Trailside Museums, and the Old Faithful Inn. The majority of Yellowstone's historic structures are located within six historic districts and other developed areas. Historic Districts that have had Consensus Determinations of Eligibility are the Canyon Village Historic District (Mission 66), the Blister Rust Camp at Canyon Administrative Area, the Old Faithful Visitor Center Historic District (Mission 66), Tower Junction Historic District, Stephens Creek Administrative Area in Montana, and the Fishing Bridge Historic District.

Some of the structures and buildings are located outside of the historic districts or are discontiguous contributing properties to existing historic districts and developed areas. Examples of these include backcountry patrol cabins, fire towers, interpretative kiosks, snotels, seismic stations, stream flow gauging stations, roadside features, bridges, stone guardwalls and retaining walls, and other structural elements.

The Grand Loop Road is listed in the National Register. The Corkscrew Bridge (a viaduct) is in the nomination process. A Multiple Property Document for Precontact sites (providing historic context for archeological sites) is in the final stages of review for submittal to the National Register. Peer and in-house reviews have been conducted. A National Register nomination of precontact archeological site 24YE14 has completed review and is ready for submission to the National Register in conjunction with the Precontact MPD. A Multiple Property document based on Culpin (2003), and the Rydell (2004 draft) provides context for the park's historic structures and is ready for concurrent review. An addendum to the historic context for the roads was completed by the Historic American Engineering Record and submitted to the Library of Congress in January of 2003.

Additional historic structures surveys are available for most other park buildings on the LCS; they provide much useful information for consideration by park staff and others. However, these do not constitute determinations of eligibility until reviewed by the park and submitted to the SHPO for concurrence. As the park receives updated records for structures on the LCS, these will be used to supplement the historic structures surveys.

Copies of the records are in white notebooks located in Yellowstone's Heritage and Research and also at the Wyoming and Montana SHPO offices as appropriate. These notebooks include the LCS record, historic structures survey forms completed c.a. 1997 by HRA, Inc., and photographs of each structure. The LCS records are also available online by contacting a park staffer who received training in using the database, including Herb Dawson (YCR), Mary Murphy and Paul Norman (Business Management), and Debby Young and Dayna McClure (Maintenance).

National Register Listings

The following National Register listings have been accepted by the Montana and Wyoming State Historic Preservation Offices and the Keeper of the Register as of September 2004:

National Historic Landmarks	Date Listed	Site #	Number of Resources
Old Faithful Inn	07-23-1971	YE517	
	NHL (1987)	1 = 517	
Madison Junction Trailside Museum	07-09-1982	YE684	
Wadison sanstion maiste wassam	NHL (1987)	12001	
Norris Geyser Basin	07-21-1983	YE501	2 buildings
TrailsideMuseum/Comfort Station	NHL (1987)		
Obsidian Cliff	06-09-1996	YE433	1 site
	NHL (1996)		
Fishing Bridge Trailside Museum	05-28-1987	YE686	2 buildings and amphitheater
	(NHL 1987)		
Northeast Entrance Station	05-28-1987		2 buildings
	(NHL 1987)		
Fort Yellowstone	07-31-2003		40 buildings and the Ft. Yellowstone
	NHL (2003)		cemetery, parade ground, and
			Roosevelt Arch, Buffalo Lake
			Snowshoe Cabin, Norris Soldier
			Stations, Bechler Ranger Station, Barn
Historic Districts		\	
Lamar Buffalo Ranch Historic District	12-07-1982	YE680	4 buildings, 1 site
Old Faithful Historic District	12-07-1982	YE682	22 buildings plus Old Faithful cabins
Roosevelt Lodge Historic District	04-04-1983	YE681	124 buildings and corrals
Lake Fish Hatchery Historic District	06-25-1985	YE510	9 buildings
Mammoth Hot Springs Historic District	03-20-2002		189 buildings plus parade ground,
			campground, and flagpole
North Entrance Road Historic District	05-22-2002	YE822	NE Entrance Road and Roosevelt Arch
Sites			
Obsidian Cliff (Nature Shrine) Kiosk	07-09-1982	YE683	1 structure
U.S. Post Office—Yellowstone Main	05-19-1987	YE967	
Lake Hotel	05-16-1991	YE676	
Queen's Laundry Bath House	07-25-2001		

Ethnographical Resources

The NPS 2001 Management Policies defines ethnographic resources as "the cultural and natural features of a park that are of traditional significance to traditionally associated peoples." Traditionally associated peoples have as association with a landscape before it became a park and include, in the case of Yellowstone, at least 26 American Indian tribes, each having particular historical traditions associated with Yellowstone.

Tribes associated with Yellowstone, and with whom consultation occurs on a semi-annual basis, are: 1) Assiniboine & Sioux Tribes; 2) Blackfeet Tribe; 3) Cheyenne River Sioux Tribe; 4) Coeur d'Alene Tribe; 5) Comanche Tribe of Oklahoma; 6) Confederated Tribes of the Colville Reservation; 7) Confederated Tribes of the Umatilla Reservation; 8) Confederated Salish & Kootenai Tribes; 9) Crow Tribe; 10) Crow Creek Sioux Tribe; 11) Eastern Shoshone Tribe; 12) Flandreau Santee Sioux Tribe; 13) Gros Ventre and Assiniboine Tribes; 14) Kiowa Tribe of Oklahoma; 15) Lower Brule Sioux Tribe; 16) Nez Perce Tribe; 17) Northern Arapaho Tribe; 18) Northern Cheyenne Tribe; 19) Oglala Sioux Tribe; 20) Rosebud Sioux Tribe; 21) Shoshone-Bannock Tribes; 22) Sisseton-Wahpeton Sioux Tribes; 23) Spirit Lake Sioux Tribe; 24) Standing Rock Sioux Tribe; 25) Turtle Mountain Band of the Chippewa Indians; and 26) Yankton Sioux Tribe. An additional 84 American Indian tribes are consulted about the management of Yellowstone's bison herds. To date, 158 ethnographic resources have been recorded which include specific places of historical importance, hydrothermal features, plants, and wildlife.

In 2002, the following ethnographic overview and assessment was published that summarizes resources and traditions associated with 10 affiliated tribes. Yellowstone continues to collect data on ethnographic resources through subsequent consultations and oral history interviews with the 26 currently associated tribes. Information on these resources is entered into the servicewide Ethnographic Resources Inventory database, which currently includes more than 220 resources.

Nabokov, Peter and Larry Loendorf. 2002. *American Indians and Yellowstone National Park: A Documentary Overview*. National Park Service, Yellowstone Center for Resources, Yellowstone National Park, Wyoming. YC-CR-2002-1.

Cultural Landscapes

According to NPS Do-18, a cultural landscape is "...a reflection of human adaptation and use of natural resources [often] expressed in the way land is organized and divide, patters of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions."

Through a Level II Cultural Landscape Inventory (CLI) the park has initiated Consensus Determinations of Eligibility with the Montana SHPO for the Cultural Landscape at the Stephens Creek Administrative Area and with the WYSHPO for the Cultural Landscape at Artist Point Overlook. The park has submitted to WYSHPO and MTSHPO Level I CLIs for the Canyon Village, South Entrance Station, and West Entrance Station Developed Areas. Further study

through a Level II CLI will be necessary for determination of eligibility. The park is currently developing a Level II CLI for the Old Faithful Developed Area.

Other potentially eligible cultural landscapes were identified in 2000 for Yellowstone but have not yet been evaluated or determined eligible. The following list includes landscapes associated with existing historic districts and associated with historic structures that may have been determined eligible or listed in the National Register.

Fort Yellowstone–Mammoth Hot Springs

Historic District

Lake Developed Area–Fish Hatchery

Historic District

Grand Canyon of the Yellowstone including

drives and viewing areas

Fishing Bridge

Bechler River Soldier Station Historic District

Roosevelt Lodge Historic District Lamar Buffalo Ranch Historic District

Gardiner Concessions Area Historic District

North Entrance (Arch Park and triangle)

Norris Ranger Museum and Campground

West Entrance Developed Area East Entrance Developed Area

Northeast Entrance NHL

Jones Pass Trail

Bannock Trail Nez Perce Trail

Obsidian Cliff Kiosk

Bridge Bay

Canyon Development

Apollinaris Springs

Baronetts Bridge/Cabin Ruin

Biscuit Basin area and walks/Isa Lake

Lower Geyser Basin Walks

Mud Pots/Sulphur Caldron Area and Walks

Natural Bridge Area

Potts Basin

Upper Geyer Basin

Kingman Pass

Golden Gate

Eagle Nest Rock

Pelican Valley

Hoo Doo Area

Backcountry Patrol Cabins/Lookouts

Hotel ruins (Fountain Hotel, Norris Hotel 1

and 2, Marshall Firehole Hotel, Cottage

Hotel, Sylvan Pass Lodge, and Reamer

Canyon Hotel)

Waterfalls

Backcountry trails

Artist Paint Pots

Madison Museum NHL

Norris Museum NHL

Petrified Tree

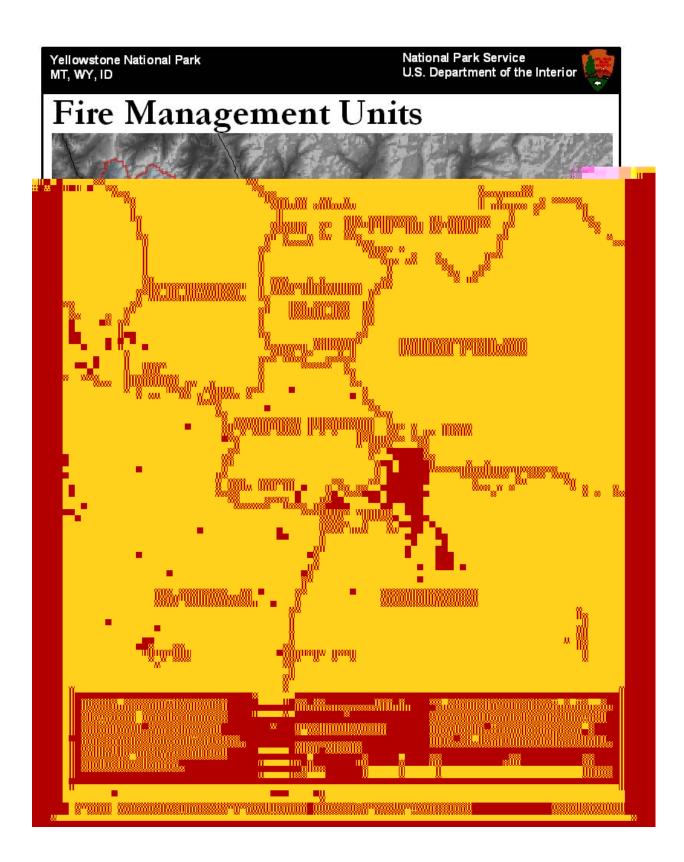
Tower Falls

Yancy's Hole

Sheep Eaters cliffs

Mount Washburn

Kepler Cascades



Attachment 4. Minimum Impact Suppression Tactics (based on the National Wildfire Coordinating Group guidelines)

The change from fire control to fire management has added a new perspective to the role of fire manager and the firefighter. Traditional thinking that "the only safe fire is a fire without a trace of smoke" is no longer valid. Fire management now means managing fire "with time" as opposed to "against time." The objective of putting the fire dead out by a certain time has been replaced by the need to make unique decisions with each fire start to consider the land, resource and incident objectives, and to decide the appropriate management response and tactics which result in minimum costs and minimum resource damage. This change in thinking and way of doing business involves not just firefighters. It involves all levels of management. Fire management requires the fire manager and firefighter to select management tactics commensurate with the fire's potential or existing behavior while producing the least possible impact on the resource being protected. The term used to describe these tactics is "Minimum Impact Suppression Tactics," commonly called MIST. Simply put: MIST is a 'do least damage' philosophy.

MIST is not intended to represent a separate or distinct classification of firefighting tactics but rather a mind set—how to suppress a wildfire while minimizing the long-term effects of the suppression action. MIST is the concept of using the minimum tool to safely and effectively accomplish the task. MIST should be considered for application on all fires in all types of land management. While MIST emphasizes suppressing wildland fire with the least impact to the land, actual fire conditions and good judgment will dictate the actions taken. Consider what is necessary to halt fire spread and containment within the fireline or designated perimeter boundary, while safely managing the incident.

Use of MIST will not compromise firefighter safety or the effectiveness of suppression efforts. Safety zones and escape routes will be a factor in determining fireline location. Accomplishments of minimum impact fire management techniques originate with instructions that are understandable, stated in measurable terms, and communicated both verbally and in writing. They are ensured by monitoring results on the ground. Evaluation of these tactics both during and after implementation will further the understanding and achievement of good land stewardship ethics during fire management activities.

GUIDELINES

The intent of this guide is to serve as a checklist for all fire management personnel. Be creative and seek new ways to implement MIST.

INCIDENT MANAGEMENT CONSIDERATIONS

- Fire managers and firefighters select tactics that have minimal impact to values at risk. These values are identified in approved Land or Resource Management Plans. Standards and guidelines are then tied to implementation practices which result from approved Fire Management Plans.
- Firefighter and public safety cannot be compromised.

- Evaluate suppression tactics during planning and strategy sessions to ensure they meet agency administrator objectives and MIST. Include agency Resource Advisor and/or designated representative.
- Communicate MIST where applicable during briefings and implement during all phases of operations.
- Evaluate the feasibility of Wildland Fire Use in conjunction with MIST when appropriate for achieving resource benefits.

RESPONSIBILITIES

Agency Administrator or Designee

- Ensure agency personnel are provided with appropriate MIST training and informational/educational materials at all levels.
- Communicate land and fire management objectives to Incident Commander.
- Periodically monitor incident to ensure resource objectives are met.
- Participate in incident debriefing and assist in evaluation of performance related to MIST.

Incident Commander

- Communicate land and fire management objectives to general staff.
- Evaluate suppression tactics during planning and strategy sessions to see that they meet the
- Agency Administrator's objectives and MIST guidelines.
- Monitor operations to ensure MIST is implemented during line construction as well as other resource disturbing activities.
- Include agency Resource Advisor and/or local representative during planning, strategy, and debriefing sessions.

Resource Advisor

- Ensure interpretation and implementation of WFSA/WFIP and other oral or written line officer direction is adequately carried out.
- Participate in planning/strategy sessions and attend daily briefings to communicate resource
- concerns and management expectations.
- Review Incident Action Plans (IAP) and provide specific direction and guidelines as needed.
- Monitor on the ground applications of MIST.
- Provide assistance in updating WFSA/WFIP when necessary.
- Participate in debriefing and assist in evaluation of performance related to MIST.

Planning Section

- Use Resource Advisor to help assess that management tactics are commensurate with land/resource and incident objectives.
- Ensure that instructions and specifications for MIST are communicated clearly in the IAP.
- Anticipate fire behavior and ensure all instructions can be implemented safely.

Logistics Section

• Ensure actions performed around Incident Command Post (ICP), staging areas, camps, helibases, and helispots result in minimum impact on the environment.

Operations Section

- Evaluate MIST objectives to incorporate into daily operations and IAP.
- Monitor effectiveness of suppression tactics in minimizing impacts to resources and recommend necessary changes during planning/strategy sessions.
- Communicate MIST to Division Supervisors and Air Ops/Support during each operational period briefing. Explain expectations for instructions listed in Incident Action Plan.
- Participate in incident debriefing and assist in evaluation of performance related to MIST.

Division/Group Supervisor and Strike Team/Task Force Leader

- Communicate MIST objectives and tactics to single resource bosses.
- Recommend specific tasks on divisions to implement MIST.
- Monitor effectiveness of suppression tactics in minimizing impacts to resources and recommend necessary changes to Operations Section Chief.

Single Resource Bosses

- Communicate MIST objectives to crew members.
- Monitor work to ensure that crews are adhering to MIST guidelines and specific incident objectives.
- Provide feedback to supervisor on implementation of MIST.

IMPLEMENTATION

- Keep this question in mind: What creates the greater impact, the fire suppression effort or the fire?
- Safety
- Apply principles of LCES to all planned actions.
- Constantly review and apply the 18 Watch Out Situations and 10 Standard Fire Orders.
- Be particularly cautious with:
 - o Burning snags allowed to burn.
 - o Burning or partially burned live and dead trees.
 - o Unburned fuel between you and the fire.

Escape Routes and Safety Zones

- In any situation, the best escape routes and safety zones are those that already exist. Identifying natural openings, existing roads and trails and taking advantage of safe black will always be a preferred tactic compatible with MIST. If safety zones must be created, follow guidelines similar to those for helispot construction.
- Constructed escape routes and safety zones in heavier fuels will have a greater impact, be more time consuming, labor intensive and ultimately less safe.
- General Considerations
 - Consider the potential for introduction of noxious weeds and mitigate by removing weed seed from vehicles, personal gear, cargo nets, etc.
 - o Consider impacts to riparian areas when siting water handling operations.
 - Use longer draft hoses to place pumps out of sensitive riparian areas.
 - o Plan travel routes for filling bladder bags to avoid sensitive riparian areas.
 - Ensure adequate spill containment at fuel transfer sites and pump locations. Stage spill containment kits at the incident.

• Fire Lining Phase

- o Select tactics, tools, and equipment that least impact the environment.
- o Give serious consideration to use of water or foam as a firelining tactic.
- Use alternative mechanized equipment such as excavators and rubber tired skidders rather than bulldozers when constructing mechanical line.
- o Allow fire to burn to natural barriers and existing roads and trails.
- o Monitor and patrol firelines to ensure continued effectiveness.

• Ground Fuels

- Use cold-trail, wet line or combination when appropriate. If constructed fireline is necessary, use minimum width and depth to stop fire spread.
- o Consider the use of fireline explosives (FLE) for line construction and snag falling to create more natural appearing firelines and stumps.
- o Burn out and use low impact tools like swatters and gunny sacks.
- Minimize bucking to establish fireline: preferably move or roll downed material out of the intended constructed fireline area. If moving or rolling out is not possible, or the downed log/bole is already on fire, build line around it and let the material be consumed.

Aerial fuels: brush, trees, and snags

- Adjacent to fireline: limb only enough to prevent additional fire spread.
- Inside fireline: remove or limb only those fuels which would have potential to spread fire outside the fireline.
- Cut brush or small trees necessary for fireline construction flush to the ground.
- Trees, burned trees, and snags:
- Minimize cutting of trees, burned trees, and snags.
- Do not cut live trees unless it is determined they will cause fire spread across the fireline or seriously endanger workers. Cut stumps flush with the ground.
- Scrape around tree bases near fireline if hot and likely to cause fire spread.
- Identify hazard trees with flagging, glowsticks, or a lookout.
- When using indirect attack:
 - Do not fall snags on the intended unburned side of the constructed fireline unless they are an obvious safety hazard to crews.
 - Fall only those snags on the intended burn-out side of the line that would reach the fireline should they burn and fall over.

Mopup Phase

- o Consider using "hot-spot" detection devices along perimeter (aerial or hand-held).
- Use extensive cold-trailing to detect hot areas.
- Cold-trail charred logs near fireline: do minimal scraping or tool scarring.
 Restrict spading to hot areas near fireline.
- o Minimize bucking of logs to check for hot spots or extinguish fire: preferably roll the logs and extinguish the fire.
- When ground is cool return logs to original position after checking.
- o Refrain from piling: burned/partially burned fuels that were moved should be arranged in natural positions as much as possible.
- o Consider allowing larger logs near the fireline to burn out instead of bucking into manageable lengths. Use a lever, etc. to move large logs.

- Use gravity socks in stream sources and/or combination of water blivets and fold-a-tanks to minimize impacts to streams.
- Personnel should avoid using rehabilitated firelines as travel corridors whenever possible because of potential soil compaction and possible detrimental impacts to rehab work.
- o Avoid use of non-native materials for sediment traps in streams.
- o Aerial fuels (brush, small trees, and limbs): remove or limb only those fuels which if ignited have potential to spread fire outside the fireline.

• Burning trees and snags:

- o Be particularly cautious when working near snags (ensure adequate safety measures are communicated).
- o The first consideration is to allow a burning tree/snag to burn itself out or down.
- o Identify hazard trees with flagging, glow-sticks or a lookout.
- o If there is a serious threat of spreading firebrands, extinguish with water or dirt.
- o Consider felling by blasting, if available.

Aviation Management

- Minimize the impacts of air operations by incorporating MIST in conjunction with the standard aviation risk assessment process.
- Possible aviation related impacts include:
- Damage to soils and vegetation resulting from heavy vehicle traffic, noxious weed transport, and/or extensive modification of landing sites.
- Impacts to soil, fish and wildlife habitat, and water quality from hazardous material spills.
- Chemical contamination from use of retardant and foam agents.
- Biological contamination to water sources, e.g., whirling disease.
- Safety and noise issues associated with operations in proximity to populated areas, livestock interests, urban interface, and incident camps and staging areas.

Helispot Planning

- When planning for helispots determine the primary function of each helispot, e.g., crew transport or logistical support.
- Consider using long-line remote hook in lieu of constructing a helispot.
- Consult Resource Advisors in the selection and construction of helispots during incident planning.
- Estimate the amount and type of use a helispot will receive and adapt features as needed.
- Balance aircraft size and efficiency against the impacts of helispot construction.
- Use natural openings as much as possible. If tree felling is necessary, avoid high visitor use locations unless the modifications can be rehabilitated. Fall, buck, and limb only what is necessary to achieve a safe and practical operating space.

Retardant, Foam, and Water Bucket Use

- Assess risks to sensitive watersheds from chemical retardants and foam. Communicate specific drop zones to air attack and pilots, including areas to be avoided.
- Fire managers should weigh use of retardant with the probability of success by unsupported ground force. Retardant may be considered for sensitive areas when benefits will exceed the

overall impact. This decision must take into account values at risk and consequences of expanded fire response and impact on the land.

- Consider biological and/or chemical contamination impacts when transporting water.
- Limited water sources expended during aerial suppression efforts should be replaced. Consult
- Resource Advisors prior to extended water use beyond initial attack.

Logistics, Camp Sites, and Personal Conduct

- Consider impacts on present and future visitors.
- Provide portable toilets at areas where crews are staged.
- Good campsites are found, not made. If existing campsites are not available, select campsites not likely to be observed by visitors
- Select impact-resistant sites such as rocky or sandy soil, or openings within heavy timber. Avoid camping in meadows and along streams or shores.
- When there is a small group, try to disperse use. In the case of larger camps, concentrate, mitigate, and rehabilitate.
- Lay out camp components carefully from the start. Define cooking, sleeping, latrine, and water supplies.
- Prepare bedding and campfire sites with minimal disturbance to vegetation and ground.
- Personal Sanitation:
 - Designate a common area for personnel to wash up. Provide fresh water and biodegradable soap.
 - o Do not introduce soap, shampoo or other chemicals into waterways.
 - o Dispose of wastewater at least 200 feet from water sources.
 - o Toilet sites should be located a minimum of 200 feet from water sources. Holes should be dug 6-8 inches deep.
 - o If more than 1 crew is camped at a site strongly consider portable toilets and remove waste.
 - Store food so that it is not accessible to wildlife, away from camp and in animal resistant containers.
 - o Do not let garbage and food scraps accumulate in camp.
- Monitor travel routes for damage and mitigate by:
 - o Dispersing on alternate routes or concentrating travel on one route and rehabilitate at end of use.
 - If a campfire is built, leave no trace of it and avoid using rock rings. Use dead and down wood for the fire and scatter any unused firewood. Do not burn plastics or metal.

Restoration and Rehabilitation

Firelines:

- After fire spread has stopped and lines are secured, fill in deep and wide firelines and cup trenches and obliterate any berms.
- Use waterbars to prevent erosion, or use woody material to act as sediment dams.
- Ensure stumps are cut flush with ground.
- Camouflage cut stumps by flush-cutting, chopping, covering, or using FLE to create more natural appearing stumps.

- Any trees or large size brush cut during fireline construction should be scattered to appear natural.
- Discourage the use of newly created firelines and trails by blocking with brush, limbs, poles, and logs in a naturally appearing arrangement.
- Camps:
- o Restore campsite to natural conditions.
- Scatter fireplace rocks and charcoal from fire, cover fire ring with soil, and blend area with natural cover.
- o Pack out all garbage.
- General:
 - o Remove all signs of human activity.
 - o Restore helicopter landing sites.
 - o Fill in and cover latrine sites.
 - Walk through adjacent undisturbed areas and take a look at your rehab efforts to determine your success at returning the area to as natural a state as possible.
 - o Cover/fill in latrine sites.

Attachment 5. Proposed Hazardous Fuels Treatments in Developed Areas and Backcountry Cabins and Compliance Status: 2005-2013

Year Areas # of Acres or HF Completed² Completed³ 2005 WY Bechler 18 WUI Yes (2002 EA) Will be submitted Jan. 20 2006 WY Norris 11 WUI No No 2007 WY Madison 50 WUI No No 2008 WY Old Faithful 50 WUI No No 2009 WY Grant Village 11 WUI No No 2010 WY Tower-Roosevelt 18 WUI No No 2011 WY Fishing Bridge 11 WUI No No 2012 WY Mammoth 11 WUI No No 2013 WY Bridge Bay 11 WUI No No 2005 WY Heart Lake 5 HF Yes (2002 EA) Will be submitted Jan. 20 2005 WY Thorofare 8 HF	Fiscal	State	Developed	Approximate	WUI	NEPA	NHPA Section 106
My		State					
2006	7 0 07		711 040	" or Acres		oompicted	oompreted.
2007		WY	Bechler	18	WUI	Yes (2002 EA)	Will be submitted Jan. 2005
2008	2006	WY	Norris	11	WUI	No	No
2009	2007	WY	Madison	50		No	No
2010	2008	WY	Old Faithful	50	WUI	No	No
2011	2009	WY	Grant Village	11	WUI	No	No
2012 WY Mammoth 11 WUI No No No	2010	WY	Tower-Roosevelt	18	WUI	No	No
2013 WY Bridge Bay 11 WUI No No No	2011	WY	Fishing Bridge	11	WUI	No	No
Backcountry Cabins	2012	WY	Mammoth	11	WUI	No	No
Cabins WY Heart Lake 5 HF Yes (2002 EA) Will be submitted Jan. 20	2013	WY	Bridge Bay	11	WUI	No	No
2005 WY Heart Lake 5 HF Yes (2002 EA) Will be submitted Jan. 20 2005 WY Thorofare 8 HF Yes (2002 EA) Will be submitted Jan. 20 2005 MT South Riverside 7 HF Yes (2002 EA) Will be submitted Jan. 20 2006 WY Three Rivers 5 HF Yes (2002 EA) No 2006 WY Mary Mountain 14 HF Yes (2002 EA) No 2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No <							
2005 WY Thorofare 8 HF Yes (2002 EA) Will be submitted Jan. 20 2005 MT South Riverside 7 HF Yes (2002 EA) Will be submitted Jan. 20 2006 WY Three Rivers 5 HF Yes (2002 EA) No 2006 WY Mary Mountain 14 HF Yes (2002 EA) No 2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No			Cabins				
2005 MT South Riverside 7 HF Yes (2002 EA) Will be submitted Jan. 20 2006 WY Three Rivers 5 HF Yes (2002 EA) No 2006 WY Mary Mountain 14 HF Yes (2002 EA) No 2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2009			Heart Lake				Will be submitted Jan. 2005
2006 WY Three Rivers 5 HF Yes (2002 EA) No 2006 WY Mary Mountain 14 HF Yes (2002 EA) No 2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF No No 2009 WY							Will be submitted Jan. 2005
2006 WY Mary Mountain 14 HF Yes (2002 EA) No 2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY <			South Riverside				Will be submitted Jan. 2005
2006 WY Cove 10 HF Yes (2002 EA) No 2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY		WY	Three Rivers	5	HF	Yes (2002 EA)	No
2007 WY Nez Perce 11 HF Yes (2002 EA) No 2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2010 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Calfe		WY	Mary Mountain	14	HF	Yes (2002 EA)	No
2007 WY Fawn Pass 9 HF Yes (2002 EA) No 2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY <	2006	WY	Cove	10	HF	Yes (2002 EA)	No
2007 MT Daly Creek 10 HF Yes (2002 EA) No 2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY	2007	WY	Nez Perce	11	HF	Yes (2002 EA)	No
2008 WY Sportsman Lake 12 HF Yes (2002 EA) No 2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY	2007	WY	Fawn Pass	9	HF	Yes (2002 EA)	No
2008 WY Cabin Creek 5 HF Yes (2002 EA) No 2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY		MT	Daly Creek				No
2008 WY Observation Peak 12 HF Yes (2002 EA) No 2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY<	2008	WY	Sportsman Lake	12	HF	Yes (2002 EA)	No
2008 ID Buffalo Lake 5 HF Yes (2002 EA) No 2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2008	WY	Cabin Creek	5	HF	Yes (2002 EA)	No
2009 WY Pelican Springs 5 HF No No 2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No		WY	Observation Peak	12	HF	Yes (2002 EA)	No
2009 WY Upper Miller 12 HF Yes (2002 EA) No 2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2008	ID	Buffalo Lake		HF	Yes (2002 EA)	No
2009 WY Trail Creek 8 HF Yes (2002 EA) No 2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No		WY	Pelican Springs		HF		No
2010 WY Fern Lake 9 HF Yes (2002 EA) No 2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No							
2010 WY Calfee Creek 13 HF Yes (2002 EA) No 2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No			Trail Creek				No
2010 WY Cache Creek 15 HF Yes (2002 EA) No 2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2010	WY	Fern Lake	9	HF	Yes (2002 EA)	No
2010 WY Lamar Mountain 7 HF Yes (2002 EA) No 2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2010	WY	Calfee Creek		HF	Yes (2002 EA)	No
2011 WY Lower Slough Creek 7 HF Yes (2002 EA) No 2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No			Cache Creek	15		Yes (2002 EA)	No
2011 WY Elk Tongue 5 HF Yes (2002 EA) No 2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2010	WY	Lamar Mountain	7	HF	Yes (2002 EA)	No
2011 WY Lower Blacktail 13 HF Yes (2002 EA) No 2012 WY Cold Creek 5 HF No No	2011	WY		7	HF	Yes (2002 EA)	No
2012 WY Cold Creek 5 HF No No		WY	Elk Tongue		HF	Yes (2002 EA)	No
		WY		13	HF	Yes (2002 EA)	No
2012 WY Outlet Cabin 10 HF Yes (2002 EA) No	2012	WY	Cold Creek	5	HF		No
	2012	WY	Outlet Cabin	10	HF	Yes (2002 EA)	No
2012 WY Union Falls 10 HF Yes (2002 EA) No	2012	WY	Union Falls	10	HF	Yes (2002 EA)	No

¹ WUI=Wildland-Urban Interface Fuels Reduction; HF=Hazardous Fuels Reduction
2 "No"=compliance under NEPA as either a Categorical Exclusion, Environmental Assessment (EA), or Environmental Impact Statement (EIS) will be completed prior to project implementation.
3 "No"=compliance under Section 106 of the National Historic Preservation Act (NHPA) will be completed prior to project

implementation.

Appendix H. Section 106 Concurrence of *No Adverse Effect* Responses from the Idaho, Montana, and Wyoming State Historic Preservation Offices.

FMP Fons; 2004 update
3. Minimum Impact Suppression Tactics During Suppression Responses

Yellowstone will adhere to the MIST guidelines to avoid or mitigate impacts to sensitive cultural resources. These include specific mitigation measures such as fireline construction and mop-up (including ground and aerial fuels); aviation management (including retardant, foam, and water bucket use); logistics, firefighter camp sites, staging areas, helispots, and personal conduct; and restoration and rehabilitation.

4. Education

Fire management staff, cultural resource specialists and resource advisors will educate fire crews on the appropriate method of protection of cultural resource sites and features during suppression, WFU, PF, and hazardous fuels reduction treatments. The methods chosen are dependent on fire behavior and the type of cultural resource to be protected. The type of methods available include digging of hand line to redirect the fire around or away from the feature or areas, the use of hoses to lay wet lines, sprinklers, and shelters.

5. Monitoring

Peoples monitoring of WEII fires may require on the ground helding settings all manual

11.



JAN 0 6 2005

SUPERINTENDENT'S OFFICE



Our mission: to educate through the identification, preservation, and interpretation of Idaho's cultural heritage.

Dirk Kempthorne Governor of Idaho

Steve Guerber

Executive Director

Administration 1109 Main Street, Suite 250 Boise, Idaho 83702-5642 Office: (208) 334-2682 Fax: (208) 334-2774

Archaeological Survey 210 Main Street Boise, Idaho 83702-7264 Office: (208) 334-3847 Fax: (208) 334-2775

Capitol Education Center Statehouse/P.O. Box 83720 Boise, Idaho 83720-0001 Office: (208) 334-5174

Historical Museum and Education Programs 610 North Julia Davis Drive Boise, Idaho 83702-7695 Office: (208) 334-2120 Fax: (208) 334-4059

Historic Preservation Office 210 Main Street Boise, Idaho 83702-7264 Office; (208) 334-3861 Fax: (208) 334-2775

Historic Sites Office 2445 Old Penikentiary Road Boise, Idaho 83712-8254 Office: (208) 334-2844 Eax: (208) 334-2225 Ms. Suzanne Lewis Superintendent, Yellowstone National Park P.O. Box 168 Yellowstone National Park, WY 82190

RE: 2004 Update of the Yellowstone National Park 1992 Wildland Fire Management Plan

Dear Ms. Lewis:

Thank you for sending the 2004 update of the 1992 Wildland Fire Management Plan for Yellowstone National Park. We agree that the update will have no adverse effect on historic properties. We are pleased that NPS plans to conduct post-WFU surveys to monitor fire effects on known cultural resources. This will add to a growing body of knowledge about the potential for fire effects on archaeological properties. It also appears that Yellowstone has an effective system in place for communication between the cultural resource and fire management personnel. As you know, such communication is critical to protect cultural resources during fire planning and suppression.

For future reference, we found one statement under "Mitigation—Planning during the Non-Fire Season" somewhat misleading. The second paragraph on page 5 states that "Structures that have been determined ineligible for the National Register will not be considered as a resource value to be protected under the 2004 Update." Fire management staff should understand, however, that the National Register eligibility of properties can change over time, and they must ensure that the evaluation of any given property under consideration is a current one.

We are made to the second of t

ARTS. PARKS. HISTORY.

Wyoming Department of State Parks and Cultural Resources

WYOMING STATE HISTORIC PRESERVATION OFFICE Claudia Nissley

State Historic Preservation Officer

BARRETT BUILDING, 2301 CENTRAL AVE, CHEYENNE, WY 82002 (307) 777-7697

RECEIVED

FFR 2 5 2005

SUPERINTENDENT'S OFFICE

February 22, 2005

Suzanne Lewis
Superintendent
Yellowstone National Park
P.O. Box 168
Yellowstone NP, WY 82190-

RE:

2004 Update of the Yellowstone National Park 1992 Wildland Fire Management

Plan (SHPO File # 0205SES006)

Dear Ms. Lewis:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced project. We have reviewed the updated 2004 Wildland Fire Management Plan and concur with your determination that the plan will not result in adverse effects to historic properties.

This letter should be retained in your files as documentation of a SHPO concurrence on your finding of no adverse effect. Please refer to SHPO project 0205SES006 on any future correspondence regarding this project. If you have any questions, please contact me at 307-777-7498.

Sincerely,

Sara E. Needles

Deputy State Historic Preservation Officer

Rudler

for

Claudia Nisslev

State Historic Preservation Officer